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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,700	01/30/2001	Hiroshi Okamoto	_ 010064	9493
23850	7590 02/09/2004		EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			AHMED, SHEEBA	
1725 K STRE SUITE 1000	ET, NW		ART UNIT	PAPER NUMBER
WASHINGTO	ON, DC 20006		1773	લ
			DATE MAILED: 02/09/2004	, 7

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	09/771,700	OKAMOTO ET AL.	
Office Action Summary	Examiner	Art Unit	
	Sheeba Ahmed	1773	
The MAILING DATE of this c mmunication a	appears on the cover sheet w	ith the corresp ndence address	
Period for Reply		· O. I.T. I.(O.) ED O. I	
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATIOI  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of this iod will apply and will expire SIX (6) MOI stute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communi BANDONED (35 U.S.C. § 133).	cation.
Status			
1)⊠ Responsive to communication(s) filed on <u>07</u>	7 November 2003.		
2a) This action is <b>FINAL</b> . 2b) ☑ T	his action is non-final.		
3) Since this application is in condition for allow	wance except for formal mat	ters, prosecution as to the meri	ts is
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.[	D. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>5-14</u> is/are pending in the applicati	on.		
4a) Of the above claim(s) is/are withd			
5)⊠ Claim(s) <u>6,9 and 10</u> is/are allowed.			
6)⊠ Claim(s) <u>5,7,8 and 11-14</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	d/or election requirement.		
Application Papers			
9) The specification is objected to by the Exami	iner.		
10) The drawing(s) filed on is/are: a) a		by the Examiner.	
Applicant may not request that any objection to the	he drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).	·
Replacement drawing sheet(s) including the corr	ection is required if the drawing	(s) is objected to. See 37 CFR 1.1	21(d).
11) The oath or declaration is objected to by the	Examiner. Note the attache	d Office Action or form PTO-15	2.
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for forei a)⊠ All b)□ Some * c)□ None of: 1.⊠ Certified copies of the priority docume		§ 119(a)-(d) or (f).	
2. Certified copies of the priority docume		Application No	
3. Copies of the certified copies of the pr			e
application from the International Bure			
* See the attached detailed Office action for a li	ist of the certified copies not	received.	
.ttachment(s)			
) Notice of References Cited (PTO-892)		Summary (PTO-413)	
<ul> <li>) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0</li> </ul>		s)/Mail Date nformal Patent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:		

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#### **DETAILED ACTION**

### Response to Amendment

1. Amendments to claims 5, 6, and 8-10 have been entered in the above-identified application. Claims 1-4 have been cancelled. New claims 11-14 have been added.

Claims 5-14 are now pending.

## Claim Objections

2. The top of Page 5 recites the phrase "functional resin composition is a filament or secondary products from the filament". This phrase is not associated with any claims and hence should be deleted.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 5, 7, 8, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. (US 6,156,817) in view of Cochran II, et al. (US 6,211,500 B1).

Okamoto et al. disclose a functional form, i.e., a molded article, comprising a resin compounded with a functional component, having antimicrobial properties or deodorizing properties, selected from the group consisting of a catechin, a saponin, a

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tea-leaf powder, a tea-leaf extract and tannin and a ceramics component (Column 2, lines 25-26 and 36-42). The functional component and the ceramics component are in a state of composite particles wherein these components have been compounded together (Column 2, lines 58-64). The ceramics component may be a combination of ceramics particles, an inorganic sintering aid and an inorganic flocculent, a combination of an inorganic sintering aid and an inorganic flocculent or a water swelling clay mineral (Column 3, lines 55-61 and Column 4, lines 44-46). The shape of the functional form can be a filament (Column 8, lines 15-16) and the molding is useful as a filter for air conditioners, air cleaners and vacuum cleaners (Column 8, lines 30-35).

Okamoto et al. do not specifically state that their functional form, i.e., the functional composition or the functional molding, comprises a finely divided tabular mineral.

However, Cochran, II et al. disclose a melt processed, molded composition comprising polyolefin and a platy inorganic mineral such as mica (Column 3, lines 28-32, Column 4, lines 23-30 and Column 8, lines 40-50). The mica provides a reinforcement effect and is preferable compared to other inorganic fibrous fillers given that less weight % of mica is required to obtain the same effect as with other inorganic fillers. The mica is easily cleaved to obtain leaf-like flakes and is much softer than other inorganic fillers, has a slippery tactile feel and low abrasiveness compared to other fillers (Column 9, lines 50-65). Accordingly, it would have been obvious to one having ordinary skill in the art to add mica to the functional composition and molding disclosed

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reinforcement effect to the molding.

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by Okamoto et al. given that Cochran II, et al. specifically teach that doing so provides a

## Response to Arguments

4. The rejections of claims 5, 7, and 8 under 35 U.S.C. 103(a) as being unpatentable over Honda et al. (US 6,465,114 B1) in view of Panush (US 5,830,567) has been withdrawn in view of the amendments made to claim 5 and the arguments presented in Paper No. 8.

However, the rejection of claims 5, 7, and 8 (as well as new claims 11-14) under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. (US 6,156,817) in view of Cochran II, et al. (US 6,211,500 B1) has been re-instated. In the Amendment submitted on February 24, 2003 (Paper No. 4), the Applicants admit that Okamoto '817 is a reference under 35 USC 102(a) and allege that this reference can be removed by perfecting foreign priority based on Japanese Application 2000-025720 filed February 2, 2000. However, Applicants claim of foreign priority has not been perfected given that a Verified Translation of the priority document has not been received by the Patent Office.

# Allowable Subject Matter

5. Claims 6, 9, and 10 are allowable.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 6 recites a functional molding containing a resin, a plant-originated functional component, a tabular mineral having a low hardness and cleavage, and a ceramics component wherein the functional molding is a core-sheath joining type or bimetal joining type molding constructed of an internal component X and an external component Y wherein the resin components of the internal component X and the external component Y may be a single resin or a combination of two resins and wherein the plant-originated functional component A, the tabular mineral and the ceramics component are formulated into both the internal component X and the external component Y. Claims 9 and 10 incorporate all the limitations of claims 5 and 6.

The closest prior art is US 6,423,408 B2 however the rejection of claims 6, 9, and 10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3 and 4 of U.S. Patent No. 6,423,408 B2 in view of Cochran II, et al. (US 6,211,500 B1) has been overcome by the filing of a terminal disclaimer.

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Mondays and Thursdays from 8am to 6pm.

Sheeba Ahmed

February 6, 2003